

**STATE OF VERMONT  
PUBLIC SERVICE BOARD**

Joint Petition of Green Mountain Power Corporation,	)	
Vermont Electric Cooperative, Inc., Vermont Electric	)	
Power Company, Inc., and Vermont Transco LLC,	)	
for a Certificate of Public Good, pursuant to 30 V.S.A.	)	Docket No. 7628
Section 248, for authority to construct up to a 63 MW	)	
wind electric generation facility and associated facilities	)	
on Lowell Mountain in Lowell, Vermont, and the	)	
installation or upgrade of approximately 16.9 miles of	)	
transmission line and associated substations in Lowell,	)	
Westfield, and Jay, Vermont.	)	

**CONSERVATION LAW FOUNDATION’S  
PROPOSED FINDINGS AND BRIEF**

Conservation Law Foundation (CLF), by and through its attorney, Sandra Levine,  
submits the following proposed findings of fact and brief in the above captioned proceeding.

**I. Introduction**

Conservation Law Foundation (CLF) supports awarding a certificate of public good for the Kingdom Community Wind project in Lowell, Vermont. The project will provide significant environmental benefits at a crucial time. The unfolding destruction in Japan from the collapse of its nuclear power plants, as well as the devastation from the recent Deepwater Horizon Oil spill in the Gulf of Mexico and the recent massive coal ash spill in Tennessee, call out for safer, cleaner, and more environmentally benign means to produce electricity. The proposed project will avoid harmful air emissions that contribute to climate change while providing valuable long-term protection for wildlife and other natural resources. Its aesthetic impact is in line with other projects and pales in comparison to the massive destruction caused by other power sources.

Overall, the Kingdom Community Wind project presents a win-win for Vermont. It allows Vermont to advance clean economic development, increase our reliance on renewable power, permanently protect valuable natural resources, and avoid polluting climate change emissions.

Pursuant to 30 V.S.A. § 248(a)(2), the Public Service Board (Board) must determine that the proposed project “will promote the general good of the state” in order for a certificate of public good to be issued. The proposed project will reduce air emissions in the region and provide benefits to Vermont in terms of avoided air pollution. These are positive climate change benefits of the project that enhance the natural environment under 30 V.S.A. § 248(b)(5), provide economic benefit to the state and its residents under 30 V.S.A. § 248(b)(4), and satisfy a portion of Vermont’s energy demand in a least cost manner as required by 30 V.S.A. § 248(b)(2).

CLF has a broad interest in ensuring electric energy is provided to Vermont and the region in a manner that is cost effective and environmentally sound. Projects approved by the Board must demonstrate that the environmental and economic benefits outweigh the costs of the project. In determining benefits and costs, the Board should look broadly at the impacts of a project. Here, the avoided air pollution that will result from the operation of this project provides significant benefits to Vermont and the region.

## **II. Air Emissions Benefits**

1. The proposed project will have no stack emissions. (Lamont 10/22/10 at 7).
2. The project is a must run source of power. When the wind is blowing, power is produced and must be utilized. (Lamont 10/22/10 at 7).
3. As a must run plant, the project will offset production from the marginal unit in New England, which in a majority of hours is a combined cycle gas plant. (Lamont 10/22/10 at 7).

## Discussion

The Kingdom Community Wind project will provide significant air quality benefits to Vermont and the region. These are benefits that must be considered in evaluating whether the project “will promote the general good of the state” as required by 30 V.S.A. § 248(a)(2).

In considering the East Haven Wind Project, the Board determined that the “Project would produce air quality benefits to Vermont by displacing other generation sources that produce emissions and would not have an undue adverse impact on air quality.” *Petition of EMDC, East Haven Wind Farm*, Final Decision and Order at 34, PSB Docket No. 6911 (July 17, 2006). There are similar benefits from the Kingdom Community Wind project. Here, the project will displace other sources of power in the region, most significantly, power generated from fossil fuels, which contributes to air pollution and global warming. These avoided air emissions will benefit the air quality in Vermont and the region.

The benefits to air quality from this project based on its avoided emissions provide a positive benefit to Vermont and demonstrate that the project “will promote the general good of the state.” 30 V.S.A. § 248(a)(2).

First, the avoided emissions demonstrate the project will help satisfy a portion of Vermont’s energy demand in a least cost manner as required by 30 V.S.A. § 248 (b)(2). The environmental benefits and reduced pollution are factors that are considered in this analysis and factors that weigh in favor of the benefits of this project.

Second, the avoided emissions demonstrate an economic benefit to the state and its residents under 30 V.S.A. § 248(b)(4). Reduced air pollution provides a healthier environment and helps Vermont remain in attainment of federal Clean Air Act requirements. 42 U.S.C. § 7470 et seq. This helps economic development in Vermont as non-attainment limits allowed activities and construction in the state. 42 U.S.C. § 7477.

Third, the avoided emissions demonstrate the project will have positive benefits on air purity and the natural environment under 30 V.S.A. § 248(b)(5). The avoided emissions are benefits to air quality that are positive impacts of this project. Just as negative impacts to air quality and the environment must be considered, the positive benefits of a project on these resources must also be considered and valued in the course of determining whether a project will promote the general good of the state in the section 248 process.

Here, the avoided air emissions that will result from the operation of this project clearly demonstrate that this project has significant positive air quality and climate change impacts. These will benefit the people, resources, and economy of Vermont and demonstrate that the project as proposed will promote the general good of the state by avoiding air pollution and greenhouse gas emissions.

### **III. Aesthetics**

4. The proposed project will be visible from the Long Trail. (Vissering 10/22/10 at 2).
5. The Long Trail traverses the state of Vermont from north to south and crosses all major east-west roadways. (Tr. 2/9/11 at 192 (Page)).
6. The towers on Mount Mansfield are visible from the Long Trail which passes close to the towers. (Tr. 2/9/11 at 199 (Page)).
7. The towers on Mount Mansfield are closer to and more visible from the Long Trail than the towers that will be on Lowell Mountain. (Tr. 2/9/11 at 191, 199 (Page)).
8. The Green Mountain Club consented to towers remaining on top of Mount Mansfield. ((Tr. 2/9/11 at 200-01 (Page); Letter to Susan Hudson from Attorney Tarrant 3/2/11)).
9. Impacts from current energy production, including acid rain and climate change, will change tree and forest habitat and the views from the Long Trail. (Tr. 2/9/11 at 209 (Page)).

## **Discussion**

There will clearly be an aesthetic impact from this project as there is from any project on a mountaintop. In the East Haven Wind project, the Board recognized the significant benefits of the proposed wind project outweighed its more limited impact on aesthetics. The same is true here.

When examined and balanced, it is clear the benefits of this project offset the visual impacts. In fact, the benefits of wind power would better protect the natural resource values and experience of hikers along the Long Trail and in the surrounding areas than would denying this project because of its limited visual impact. Wind power would avoid air pollution and avoid contributing to the devastation of the region's forests from acid precipitation. It would avoid greenhouse gas emissions that lead to climate change and threaten the region's forests and the logging, fall foliage, sugaring, skiing, snowmobiling, and hunting that occur on these lands. A reasoned analysis and evaluation of any wind project must take these into consideration. Vermont cannot simply put its head in the sand and ignore these benefits - benefits that would protect important natural resource values throughout the region - and instead focus only narrowly on limited visual impacts.

Regarding visual impacts to the Long Trail, the Green Mountain Club has already accepted towers on top of Mount Mansfield at a location far closer to the Long Trail than is being proposed here. While the turbines would be visible from the Long Trail, they would also demonstrate to hikers Vermont's commitment to reducing pollution and greenhouse gas emissions.

## **IV. Natural Resource Protection**

10. The proposed project will impact black bear habitat and will fragment wildlife habitat.

(Sorenson 1/22/10 at 19 and 1/12/11 at 8-9; Austin 10/22/10 at 7; Tr. 2/24/11 at 196

(Sorenson)).

11. To mitigate impacts to black bear habitat, and fragmentation of wildlife habitat, the following lands will be protected:

- a. “Parcel 1” consisting of approximately 292 acres shall be conserved for 25 years after completion of project decommissioning;
- b. “Parcel 2” consisting of approximately 110.3 acres shall be permanently conserved;
- c. “Parcel 3” consisting of approximately 178 acres, and including beaver wetlands shall be permanently conserved;
- d. “Parcel 4” consisting of approximately 324 acres (some portions overlap with Parcels 1 & 2) of the ridgeline shall restrict future development to renewable energy technology development;
- e. Additional lands of an adequate size and location to provide wildlife habitat connectivity to address fragmentation. (GMP-ANR-1).

12. The additional mitigation for bear habitat and the offset and mitigation to address fragmentation have significant benefits to the Vermont’s natural resources and allows them to be available for future generations. (Tr. 2/24/11 at 213 (Sorenson) (importance of permanent conservation; Tr. 2/24/11 at 228 (Sorenson) (offset and mitigation for fragmentation)).

13. At the end of the Project’s commercial operations, the project site will be restored allowing for revegetation. (GMP-ANR-1); Tr. 2/24/11 at 198 (Sorenson)).

14. Restoration includes breaking up compacted surfaces, recontouring, establishing organic matter on recontoured surfaces, and restoring stormwater management features no longer needed. (GMP-ANR-1).

15. The conservation easements provided for in the Stipulation prevent other development in the project area, in particularly any residential development which would be a larger

concern regarding impacts to habitat than the wind project. (Tr. 2/24/11 at 198 (Sorenson)).

16. To mitigate impacts from clearing during construction, topsoil will be stockpiled and redistributed and replanting efforts will begin. (GMP-ANR-1).

17. Additional mitigation includes:

- a. Post construction invasive species monitoring
- b. A revised management plan for the serpentine outcrop in the transmission corridor;
- c. Development of a public access plan. (GMP-ANR-1).

### **Discussion**

The most significant negative environmental impacts from this project involve impacts to black bear habitat and fragmentation of other wildlife habitat. In response to these impacts, the Vermont Agency of Natural Resources and Green Mountain Power have agreed to significant additional protections that are outlined in their Stipulation. These protections include the conservation of over 800 acres including lands specifically valuable for wildlife habitat connectivity. These are lands that are not currently protected and without protection would be at risk to development that would be harmful to wildlife habitat. The conservation provided for in this proceeding goes beyond the conservation for other projects. It will protect significant natural areas and mitigate the impacts to black bear habitat and fragmentation of habitat caused by the project.

The measures included in the Stipulation will also address aesthetic impacts. Provisions for restoring the construction site and recontouring and replanting the roadways at the end of the project will return the project site to its natural condition when areas affected are no longer needed. This is responsible decommissioning and minimizing impacts. It will avoid the type of blight that has been left behind on other mountains, such as the nearby abandoned asbestos mine. Restoring construction areas will reduce visual impacts and allow areas no

longer needed to grow back. The additional measures of scarring surfaces and establishing organic matter will assist revegetation in these sensitive high-elevation areas.

Impacts to wetlands and water quality as a result of the stormwater runoff were also identified as harmful. Prior to construction, the project will need both wetlands and water quality permits, including a stormwater permit. These impacts will be addressed further during those permitting processes and additional measures to avoid, minimize, or mitigate impacts would be required. 10 V.S.A. § 1259 (prohibition of discharges), 1263 (discharge permits), 1264 *et seq.* (stormwater); 33 U.S.C. § 1341 (water quality), 1344 (wetland permits).

Overall, the measures provided for in the Stipulation between ANR and GMP will address responsibly the negative visual and natural resource impacts from this project. They will ensure sound management and protection of the natural resources at the project site both during the use of the project site and after it is no longer used. The Stipulation represents a sound model for ensuring natural resource protection as renewable energy projects are developed.

## **V. Conclusion**

For the forgoing reasons, the Board should determine that the avoided emissions as a result of the operation of the Deerfield Wind project will promote the general good of the state and provide significant benefits to the people, economy, and environment of Vermont.

Dated at Montpelier, Vermont, this 21<sup>st</sup> day of March, 2011.



CONSERVATION LAW FOUNDATION

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By:

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